

TITLE

LAC SHUTTLE VECTORS

ABSTRACT OF THE DISCLOSURE

5 The invention discloses a Lac shuttle vector,
comprising at least (a) a region which regulates a plasmid
copy number; (b) an eukaryotic gene expression cassette,
which comprises at least an eukaryotic gene transcriptional
promoter sequence, a multiple cloning site and a
10 transcriptional terminator sequence; (c) a lactic acid
bacteria plasmid sequence, which comprises a plus origin of
replication, and a nucleic acid sequence encoding for a
protein which relates to the lactic acid bacteria plasmid
replication; and (d) a non-antibiotic resistance selection
15 gene and the promoter sequence thereof. The Lac shuttle
vector features a non-antibiotic resistance gene as a
selection marker, which is useful in pharmaceuticals and
foods.